

FIG. 1A

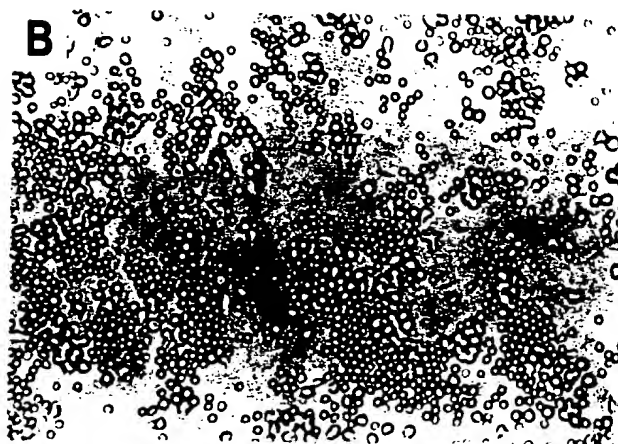


FIG. 1B

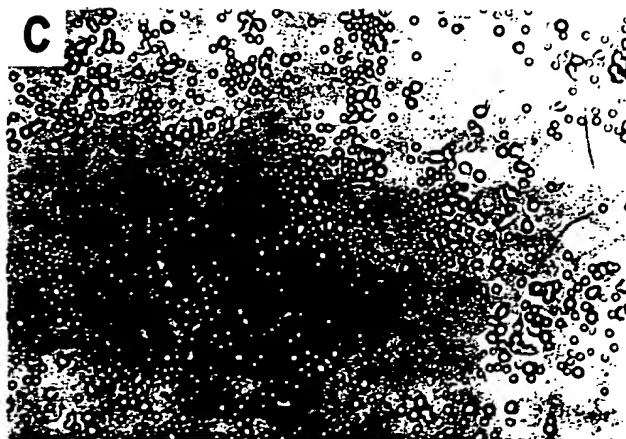


FIG. 1C

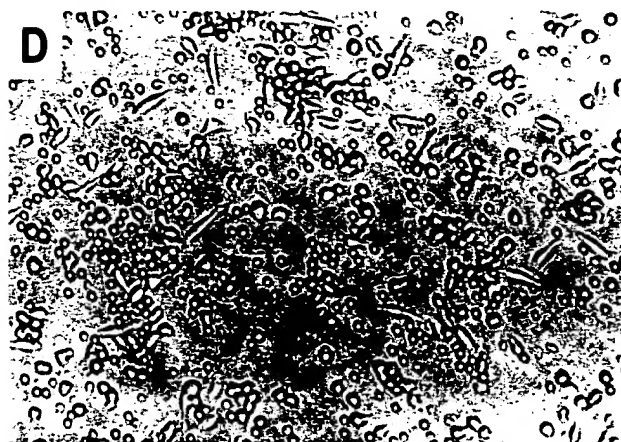


FIG. 1D

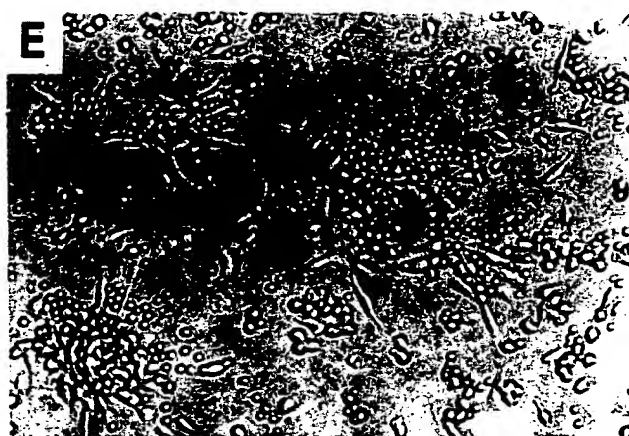


FIG. 1E

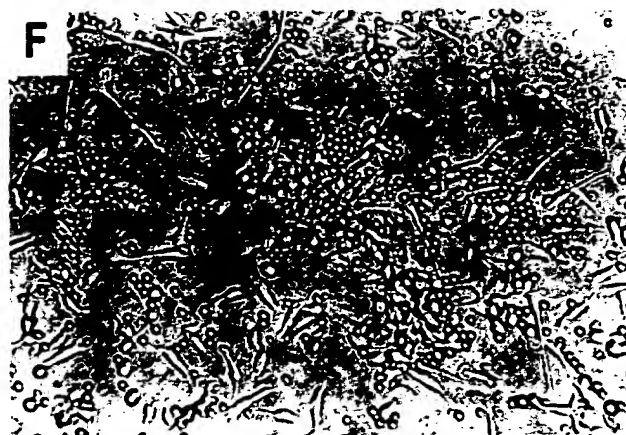


FIG. 1F



G

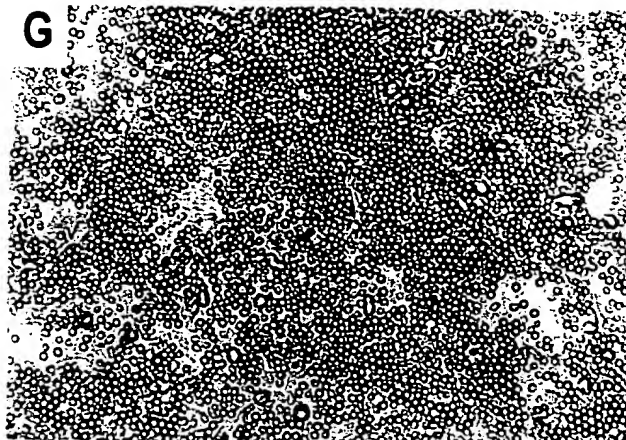


FIG. 1G

H

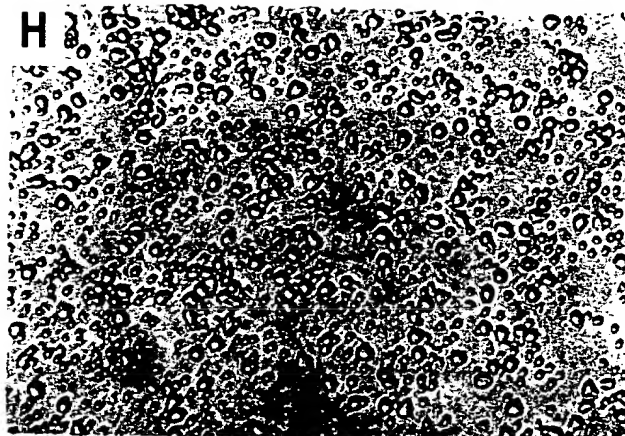


FIG. 1H

I

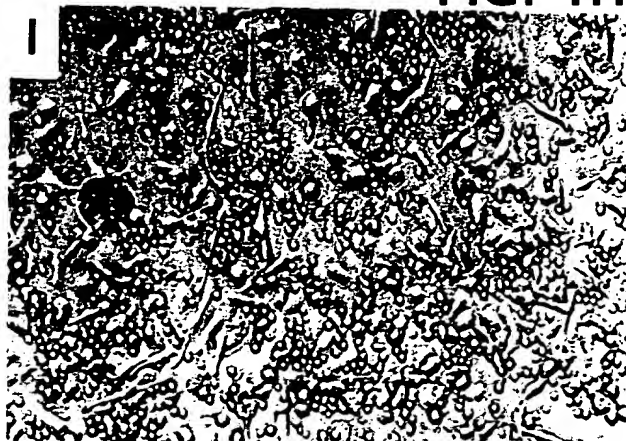


FIG. 1I



1 MVA AAAATEA RLRRRTAATA ALAGRSGGPH CVNGGRCNPG TGQCVCPAGW
51 VGEQCQHC GG RFRLTGSSGF VT DGPGNYKY KTKCTWLIEG QPNRIMRLRF
101 NHFATECSWD HLYVYDGDSI YAPLVAAFSG LIVPERDGNE TVPEVVATSG
151 YALLHFFSDA AYNLTGFNIT YSFD MCPNNC SGRGECKISN SSETVECECS
201 ENWKGEACDI PHCTDNC GFP HRGICNSSDV RGCSCFSDWQ GPGCSVPVPA
251 NQSFWTREEY SNLKLPRASH KAVVNGNIMW VVGGYMFNHS DYNMVLAYDL
301 ASREWLP LNR SVNNVVVRYG HSLALYKDKI YMYGGKIDPT GNVTNELRVF
351 HIHNESWVLL TPKAKEQYAV VGHSAHIVTL KNGRVVMLVI FGHCPLYGYI
401 SNVQEYDL DK NTWSILHTQG ALVQGGYGHS SVYDHRTRAL YVHGGYKA FS
451 ANKYRLADDL YRYD VDTQMW TILKDSRFFR YLHTAVIVSG TMLVFGGNTH
501 NDTSM SHGAK CFSSDFMAYD IACDRWSVLP RPD LHHDVNR FGHS AVLHNS
551 TMYVFGGFNS LLLSDILVFT SEQCD AHRSE AACLAAGPGI RCVWNTGSSQ
601 CISWALATDE QEEKLKSECF SKRTL DHDRC DQHTDCYSCT ANTNDCHWCN
651 DHCVPRNHSC SEGQISIFRY ENCPKDNPMY YCNKKTSCRS CALDQNCQWE
701 PRNQECIALP ENICGIGWHL VGNSCLKITT AKENYD NAKL FCRNHNALLA
751 SLTTQKKVEF VLKQLRIMQS SQMSKLT LT PWVGLRKINV SYWCWEDMSP
801 FTNSLLQWMP SEPSDAGFCG ILSEPSTRGL KAATCINPLN GSV CERPANH
851 SAKQCRTPCA LRTACGDCTS GSSECMWCSN MKQCVDSNAY VASFFPGQCM
901 EWTMSTCPP ENCSGYCTCS HCLEQPGCGW CTDPSNTGKG KCIEGSYKGP
951 VKMPSQAPTG NFYPQPLLNS SMCLEDSRYN WSFIHCPACQ CNGH SKCINQ
1001 SICEKCENLT TGKHCETCIS GFYGDPTNGG KCQPCKCNGH ASLCNTNTGK
1051 CFCTTKGVKG DECQLCEVEN RYQGNPLRGT CYYTLLIDYQ FTFSLSQEDD
1101 RYYTAINFVA TPDEQNRDL D MFINASKNFN LNITWAASFS AGTQAGEEMP
1151 VVSKTNIKEY KDSFSNEKFD FRNHPNITFF VYVSNFTWPI KIQVQTEQ

FIG. 2

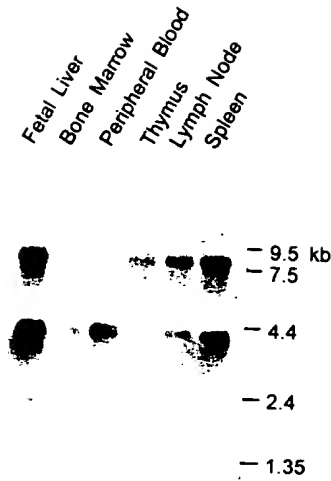


FIG. 3A

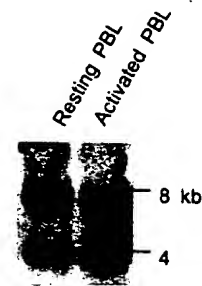


FIG. 3B

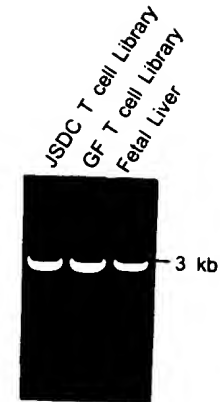


FIG. 3C

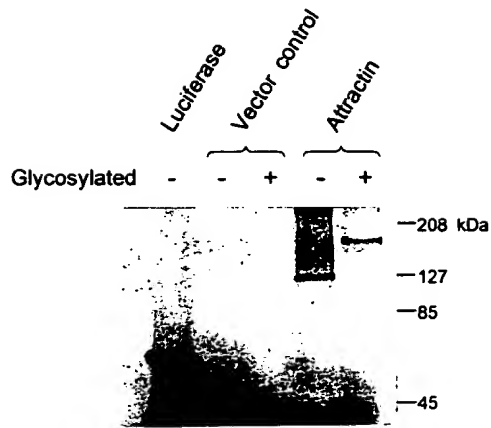


FIG. 6A

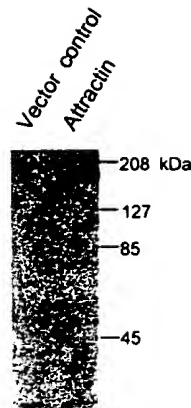


FIG. 6B

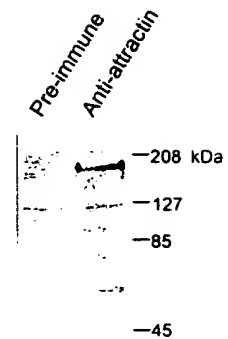


FIG. 6C

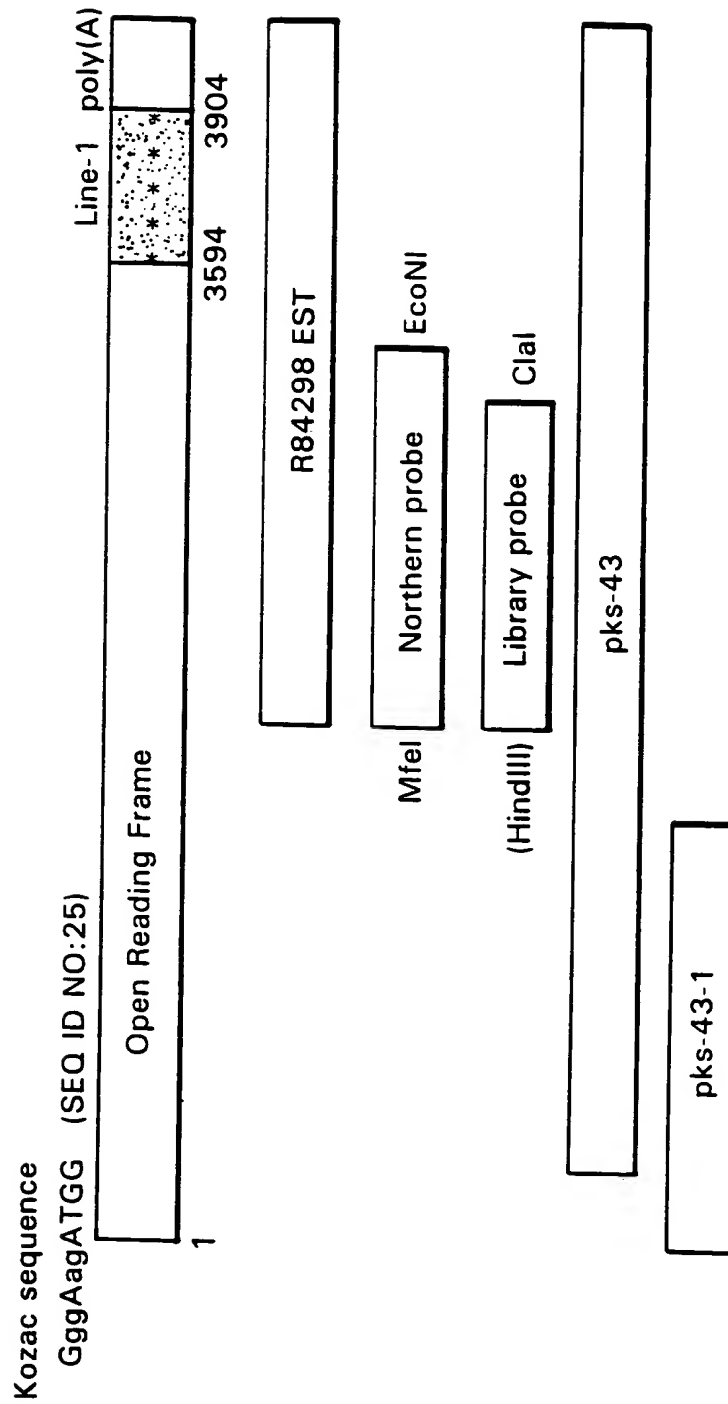


FIG. 4A



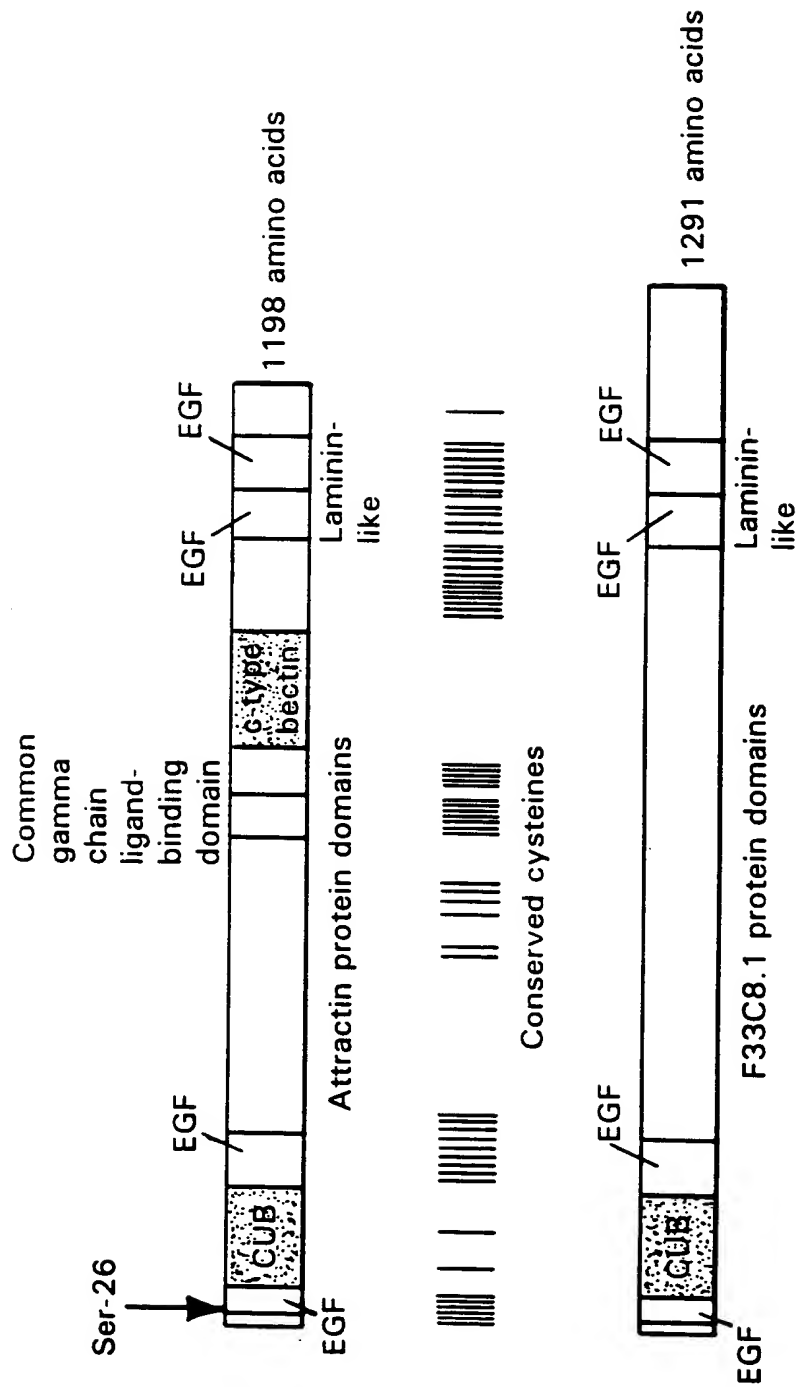


FIG. 4B



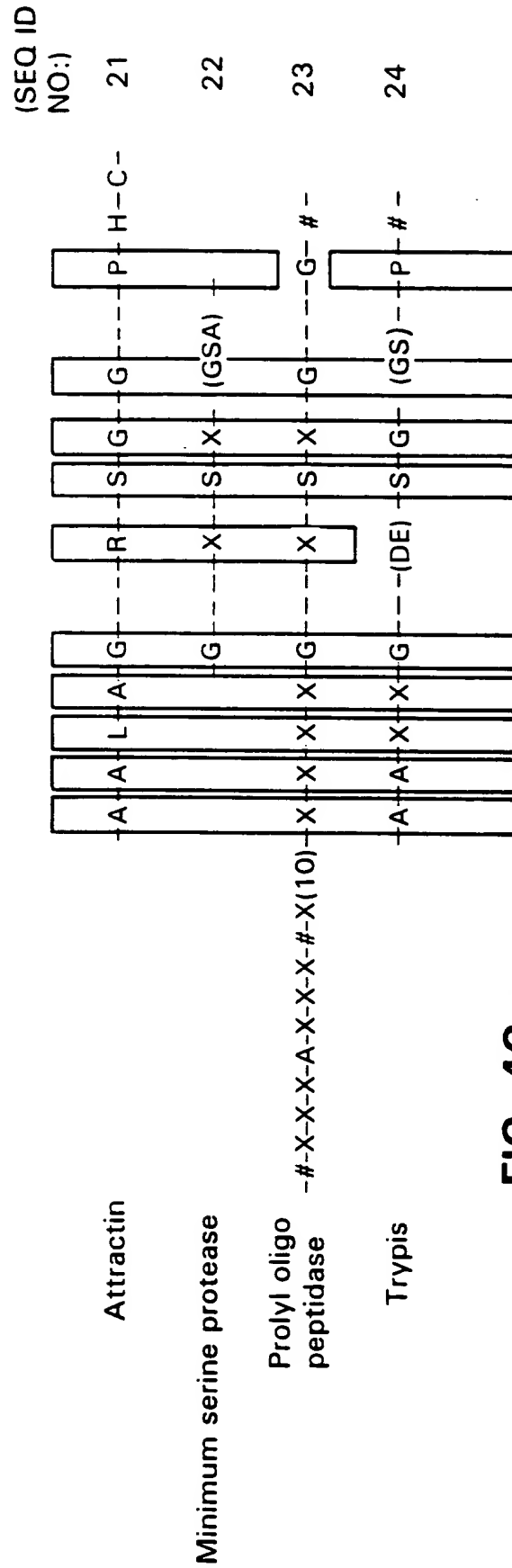
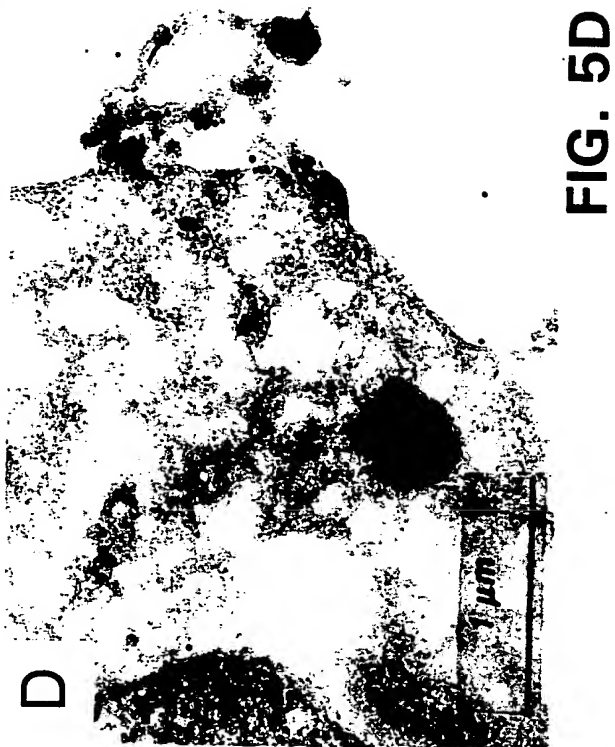
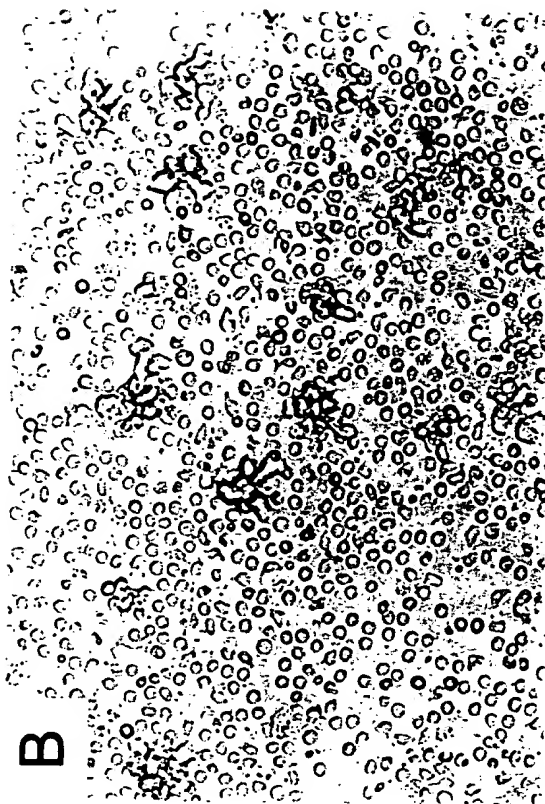


FIG. 4C

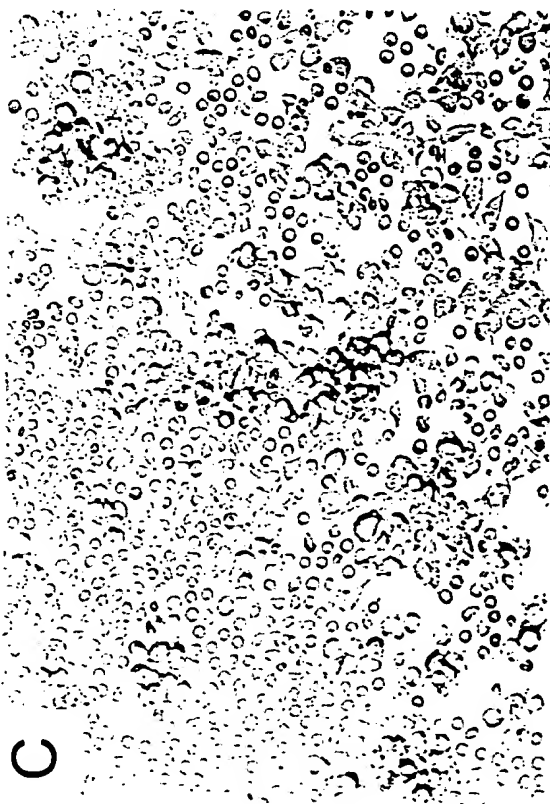






A

FIG. 7A



C

FIG. 7C

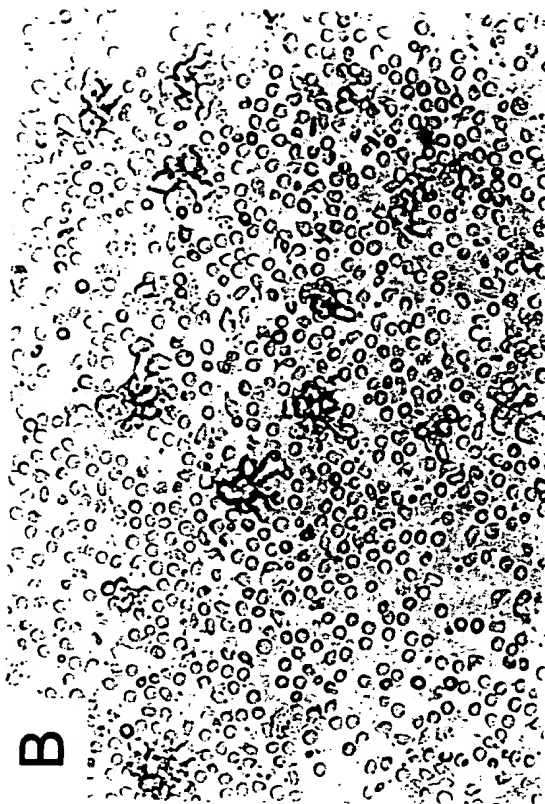
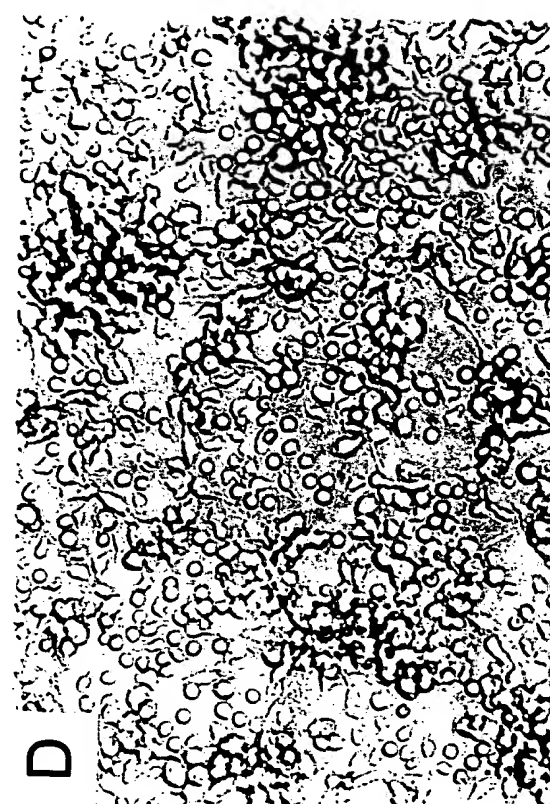


FIG. 7B



D

FIG. 7D



1 ATGGTGGCCG CAGCGGCGGC AACTGAGGCA AGGCTGAGGA GGAGGACGGC
51 GGCGACGGCA GCGCTCGCGG GCAGGAGCGG CGGGCCGCAC TGTGTCAACG
101 GCGGTCGCTG CAACCCTGGC ACCGGCCAGT GCGTCTGCCC CGCCGGCTGG
151 GTGGGCGAGC AATGCCAGCA CTGCGGGGGC CGCTTCAGAC TAACTGGATC
201 TTCTGGGTTT GTGACAGATG GACCTGGAAA TTATAAATAC AAAACGAAGT
251 GCACGTGGCT CATTGAAGGA CAGCCAAATA GAATAATGAG ACTTCGTTTC
301 AATCATTTTG CTACAGAGTG TAGTTGGGAC CATTATATATG TTTATGATGG
351 GGACTCAATT TATGCACCGC TAGTTGCTGC ATTTAGTGGC CTCATTGTTC
401 CTGAGAGAGA TGGCAATGAG ACTGTCCCTG AGGTTGTTGC CACATCAGGT
451 TATGCCTTGC TGCATTTTTT TAGTGATGCT GCTTATAATT TGA CTGATT
501 TAATATTACT TACAGTTTTG ATATGTGTcC AAATAACTGC TCAGGcCGAG
551 GAGAGTGTA GATCAGTAAT AGCAGCGAAA CTGTTGAATG TGAATGTTCT
601 GAAA ACTGGA AAGGTGAAGC ATGTGACATT CCTCACTGTA CAGACAACTG
651 TGGTTTTCTC CATCGAGGCA TCTGCAATTC AAGTGATGTC AGAGGATGCT
701 CCTGCTTCTC AGACTGGCAG GGTCCTGGAT GTTCAGTTCC TGTACCAGCT
751 AACCAGTCAT TTTGGACTCG AGAGGAATAT TCTAACTTAA AGCTCCCCAG
801 AGCATCTCAT AAAGCTGTGG TCAATGGAAA CATTATGTGG GTTGTGGAG
851 GATATATGTT CAACCACTCA GATTATAACA TGGTTCTAGC GTATGACCTT
901 GCTTCTAGGG AGTGGCTTCC ACTAAACCGT TCTGTGAACA ATGTGGTTGT
951 TAGATATGGT CATTCTTTGG CATTATACAA GGATAAAATT TACATGTATG
1001 GAGGAAAAAT TGATcCAACT GGAATGTGA CCAATGAGTT GAGAGTTTTT
1051 CACATTCATA ATGAGTCATG GGTGTTGTTG ACCCCTAAGG CAAAGGAGCA
1101 GTATGCAGTG GTTGGGCACT CTGCACACAT TGTTACACTG AAGAATGGCC
1151 GAGTGGTCAT GCTGGTCATC TTTGGTCACT GCCCTCTCTA TGGATATATA
1201 AGCAATGTGC AGGAATATGA TTTGGATAAG AACACATGGA GTATATTACA
1251 CACCCAGGGT GCCCTTGTGC AAGGGGGTTA CGGCCATAGC AGTGTTTACG
1301 ACCATAGGAC CAGGGCCCTA TACGTTTCATG GTGGCTACAA GGCTTTCAGT

FIG. 8A



1351 GCCAATAAGT ACCGGCTTGC AGATGATCTC TACCGATATG ATGTGGATAC
1401 CCAGATGTGG ACCATTCTTA AGGACAGCCG ATTTTTCGGT TACTTGCACA
1451 CAGCTGTGAT AGTGAGTGGA ACCATGCTGG TGTTTGGGGG AAACACACAC
1501 AATGACACAT CTATGAGCCA TGGCGCCAAA TGCTTCTCTT CAGATTTTCAT
1551 GGCCTATGAC ATTGCCTGTG ACCGCTGGTC AGTGCTTCCC AGACCTGATC
1601 TCCACCATGA TGTCAACAGA TTTGGCCATT CAGCAGTCTT ACACAACAGC
1651 ACCATGTATG TGTTCCGGTGG TTTCAATAGT CTCCTCCTCA GCGACATCCT
1701 GGTATTCACC TCGGAACAGT GTGATGCGCA TCGGAGTGAA GCCGCTTGTT
1751 TAGCAGCAGG ACCTGGTATT CGGTGTGTGT GGAACACAGG GTCGTCTCAG
1801 TGTATCTCGT GGGCGCTGGC AACTGATGAA CAAGAAGAAA AGTTAAAATC
1851 AGAATGTTTT TCCAAAAGAA CTCTTGACCA TGACAGATGT GACCAGCACA
1901 CAGATTGTTA CAGCTGTACA GCCAACACCA ATGACTGCCA CTGGTGCAAT
1951 GACCATTTGTG TCCCCAGGAA CCACAGCTGC TCAGAAGGCC AGATCTCCAT
2001 TTTTAGGTAT GAGAATTGCC CCAAGGATAA CCCcATGTAC TACTGTAACA
2051 AGAAGACCAG CTGCAGGAGC TGTGCCCTGG ACCAGAACTG CCAGTGGGAG
2101 CCCCGBAATC AGGAGTGCAT TGCCCTGCCC GAAAATATCT GTGGCATTGG
2151 CTGGCATTTG GTTGGAAGCT CATGTTTGAA AATTACTACT GCCAAGGAGA
2201 ATTATGACAA TGCTAAATTG TTCTGTAGGA ACCACAATGC CCTTTTGGCT
2251 TCTCTTACAA CCCAGAAGAA GGTAAGATTT GTCCTTAAGC AGCTGCGAAT
2301 AATGCAGTCA TCTCAGAGCA TGTCCAAGCT CACCTTAACC CCATGGGTGC
2351 GCCTTCGGAA GATCAATGTG TCCTACTGGT GCTGGGAAGA TATGTCCCCA
2401 TTTACAAATA GTTTACTACA GTGGATGCCG TCTGAGCCCA GTGATGCTGG
2451 ATTCTGTGGA ATTTTATCAG AACCAGTAC TCGGGGACTG AAGGCTGCAA
2501 CCTGCATCAA CCCACTCAAT GGTAAGTGTCT GTGAAAGGCC TGCAAACCAC
2551 AGTGCTAAGC AGTGCCGGAC ACCATGTGCC TTGAGGACAG CATGTGGAGA
2601 TTGCACCAGC GGCAGCTCTG AGTGCATGTG GTGCAGCAAC ATGAAGCAGT
2651 GTGTGGACTC CAATGCCTAT GTGGCCTCCT TCCCTTTTGG CCAGTGTATG

FIG. 8B



2701 GAATGGTATA CGATGAGCAC CTGCCCCCCT GAAAATTGTT CAGGCTACTG
2751 TACCTGTAGT CATTGCTTGG AGCAACCAGG CTGTGGCTGG TGTACTGATC
2801 CCAGCAATAC TGGCAAAGGG AAATGCATAG AGGGTTCCTA TAAAGGACCA
2851 GTGAAGATGC CTTCGCAAGC CCCTACAGGA AATTTCTATC CACAGCCCCCT
2901 GCTCAATTCC AGCATGTGTC TAGAGGACAG CAGATACAAC TGGTCTTTCA
2951 TTCACTGTCC AGCTTGCCAA TGCAACGGCC ACAGTAAATG CATCAATCAG
3001 AGCATCTGTG AGAAGTGTGA GAACCTGACC ACAGGCAAGC ACTGCGAGAC
3051 CTGCATATCT GGCTTCTACG GTGATCCCAC CAATGGAGGG AAATGTCAGC
3101 CATGCAAGTG CAATGGGCAC GCGTCTCTGT GCAACACCAA CACGGGCAAG
3151 TGCTTCTGCA CCACCAAGGG CGTCAAGGGG GACGAGTGCC AGCTATGTGA
3201 GGTAGAAAAT CGATACCAAG GAAACCCTCT CAGAGGAACA TGTTATTATA
3251 CTCTTCTTAT TGACTATCAG TTCACCTTTA GTCTATCCCA GGAAGATGAT
3301 CGCTATTACA CAGCTATCAA TTTTGTGGCT ACTCCTGACG AACAAAACAG
3351 GGATTTGGAC ATGTTTCATCA ATGCCTCCAA GAATTTCAAC CTCAACATCA
3401 CCTGGGCTGC CAGTTTCTCA GCTGGAACCC AGGCTGGAGA AGAGATGCCT
3451 GTTGTTTCAA AAACCAACAT TAAGGAGTAC AAAGATAGTT TCTCTAATGA
3501 GAAGTTTGAT TTTCGCAACC ACCCAAATAT CACTTTCTTT GTTTATGTCA
3551 GTAATTTTAC CTGGCCCATC AAAATTCAGG TGCAAACTGA ACAATGA

FIG. 8C



1	MVAAAAATEA	RLRRRTAATA	ALAGRSGGPH	CVNGGRCNPG	TGQCVC PAGW
51	VGEQCQHC GG	RFRLTGSSGF	VT DGPGNYKY	KTKCTWLIEG	QPNRIMRLRF
101	NHFATECSWD	HLVYVDGDSI	YAPLVAAFSG	LIVPERDGNE	TVPEVVATSG
151	YALLHFFSDA	AYNL TGFNIT	YSFDMCPNNC	SGRGECKISN	SSDTVECECS
201	ENWKGEACDI	PHCTDNCGFP	HRGICNSSDV	RGCSCFSDWQ	GPGCSVPVPA
251	NQSFWTREEY	SNLKLPRASH	KAVVNGNIMW	VVG GYMFNHS	DYNMVLAYDL
301	ASREWLPLNR	SVNNVVVRYG	HSLALYKDKI	YMYGGKIDST	GNVTNELRVF
351	HIHNESWVLL	TPKAKEQYAV	VGHSAHIVTL	KNGRVVMLVI	FGHCPLYGYI
401	SNVQEYDL DK	NTWSILHTQG	ALVQGGYGHS	SVYDHRTRAL	YVHGGYKA FS
451	ANKYRLADDL	YRYD VDTQMW	TILKDSRFFR	YLHTAVIVSG	TMLVFGGNTH
501	NDTSM SHGAK	CFSSDFMAYD	IACDRWSVLP	RPDLHHDVNR	FGHSAVLHNS
551	TMYVFGGFNS	LLLSDILVFT	SEQCDAHRSE	AACLAAGPGI	RCVWNTGSSQ
601	CISWALATDE	QEEKLKSECF	SKRTL DHDRC	DQHTDCYSCT	ANTNDCHWCN
651	DHCVPRNHSC	SEGQISIFRY	ENCPKDNPMY	YCNKKTSCRS	CALDQNCQWE
701	PRNQECIALP	ENICGIGWHL	VGNSCLKITT	AKENYDNAKL	FCRNHNALLA
751	SLTTQKKVEF	VLKQLRIMQS	SQSMSKLT LT	PWVGLRKINV	SYWCWEDMSP
801	FTNSLLQWMP	SEPSDAGFCG	ILSEPSTRGL	KAATCINPLN	GSVCERPANH
851	SAKQCRTPCA	LRTACGDCTS	GSSECMWCSN	MKQCVDSNAY	VASFPPGQCM
901	EWYTMSTCPP	ENCSGYCTCS	HCLEQPGCGW	CTDPSNTGKG	KCIEGSYKGP
951	VKMPSQAPT G	NFY PQPLLNS	SMCLED SRYN	WSFIHCPACQ	CNGH SKCINQ
1001	SICEKCENLT	TGKHCETCIS	GFYGDPTNGG	KCQPC KCNGH	ASLCNTNTGK
1051	CFCTTKGVKG	DECQLCEVEN	RYQGNPLRGT	CYYTLLIDYQ	FTFSLSQEDD
1101	RYYTAINFVA	TPDEQNRDL D	MFINASKNFN	LNITWAASFS	AGTQAGEEMP
1151	VVSKTNIKEY	KDSFSNEKFD	FRNHPNITFF	VYVSNFTWPI	KIQIAFSQHS
1201	NFMDLVQFFV	TFFSCFLSLL	LVA AVVWKIK	QSCWASRRRE	QLLREMQQMA
1251	SRPFASVNVA	LETDEEPPDL	IGGSIKTVPK	PIALEPCFGN	KAAVLSVFVR
1301	LPRGLGGIPP	PGQSGLAVAS	ALVDISQQMP	IVYKEKSGAV	RNRKQQPPAQ
1351	PGTCI				

FIG. 9



1	atggtggccg	cagcggcggc	aactgaggca	aggctgagga	ggaggacggc
51	ggcgacggca	gcgctcgcg	gcaggagcgg	cgggccgcac	tgtgtcaacg
101	gcggtcgctg	caaccctggc	accggccagt	gcgtctgccc	cgccggctgg
151	gtgggcgagc	aatgccagca	ctgcgggggc	cgcttcagac	taactggatc
201	ttctgggttt	gtgacagatg	gacctggaaa	ttataaatac	aaaacgaagt
251	gcacgtggct	cattgaagga	cagccaaata	gaataatgag	acttcgtttc
301	aatcattttg	ctacagagtg	tagttgggac	catttatatg	tttatgatgg
351	ggactcaatt	tatgcaccgc	tagttgctgc	atttagtggt	ctcattgttc
401	ctgagagaga	tggcaatgag	actgtccctg	aggttgttgc	cacatcaggt
451	tatgccttgc	tgcatttttt	tagtgatgct	gcttataatt	tgactggatt
501	taatattact	tacagttttg	atatgtgtcc	aaataactgc	tcaggccgag
551	gagagtgtaa	gatcagtaat	agcagcgata	ctggtgaatg	tgaatgttct
601	gaaaactgga	aagggtgaagc	atgtgacatt	cctcactgta	cagacaactg
651	tggtttttct	catcgaggca	tctgcaattc	aagtgatgtc	agaggatgct
701	cctgcttctc	agactggcag	ggtcctggat	gttcagttcc	tgtaccagct
751	aaccagtcac	tttggactcg	agaggaatat	tctaacttaa	agctccccag
801	agcatctcat	aaagctgtgg	tcaatggaaa	cattatgtgg	gttgttggag
851	gatatatgtt	caaccactca	gattataaca	tggttctagc	gtatgacctt
901	gcttctaggg	agtggcttcc	actaaaccgt	tctgtgaaca	atgtggttgt
951	tagatatggt	cattcttttg	cattatacaa	ggataaaaatt	tacatgtatg
1001	gaggaaaaat	tgattcaact	gggaatgtga	ccaatgagtt	gagagttttt
1051	cacattcata	atgagtcacg	ggtgttgttg	accctaagg	caaaggagca
1101	gtatgcagtg	gttgggcact	ctgcacacat	tgttacactg	aagaatggcc
1151	gagtggtcac	gctgggtcac	tttggtcact	gccctctcta	tggatatata
1201	agcaatgtgc	aggaatatga	tttggataag	aacacatgga	gtatattaca
1251	cacccagggt	gcccttgtgc	aaggggggta	cggccatagc	agtgtttacg
1301	accataggac	cagggcccta	tacgttcacg	gtggctacaa	ggctttcagc
1351	gccaataagt	accggcttgc	agatgatctc	taccgatatg	atgtggatac
1401	ccagatgtgg	accattctta	aggacagccg	atttttccgt	tacttgcaca
1451	cagctgtgat	agtgagtgga	accatgctgg	tgtttggggg	aaacacacac
1501	aatgacacat	ctatgagcca	tggcgccaaa	tgcttctctt	cagatttcat
1551	ggcctatgac	attgcctgtg	accgctggtc	agtgttccc	agacctgatc
1601	tccaccatga	tgtcaacaga	tttggccatt	cagcagtcct	acacaacagc
1651	accatgtatg	tgttcgggtg	tttcaatagt	ctcctcctca	gcgacatcct
1701	ggtattcacc	tcggaacagt	gtgatgcgca	tcggagtgaa	gccgcttggt
1751	tagcagcagg	acctgggtatt	cggtgtgtgt	ggaacacagg	gtcgtctcag
1801	tgtatctcgt	gggcgctggc	aactgatgaa	caagaagaaa	agttaaaatc
1851	agaattgttt	tccaaaagaa	ctcttgacca	tgacagatgt	gaccagcaca
1901	cagattgtta	cagctgcaca	gccaacacca	atgactgcc	ctggtgcaat
1951	gaccattgtg	tcccaggaa	ccacagctgc	tcagaaggcc	agatctccat
2001	ttttagggtat	gagaattgcc	ccaaggataa	ccctatgtac	tactgtaaca
2051	agaagaccag	ctgcaggagc	tgtgccctgg	accagaactg	ccagtgggag
2101	ccccggaatc	aggagtgcac	tgccctgccc	gaaaatatct	gtggcattgg
2151	ctggcatttg	gttggaaact	catgtttgaa	aattactact	gccaaaggaga
2201	attatgacaa	tgctaaattg	ttctgtagga	accacaatgc	ccttttggct
2251	tctcttacaa	cccagaagaa	ggtagaattt	gtccttaagc	agctgcgaat
2301	aatgcagtc	tctcagagca	tgtccaagct	caccttaacc	ccatgggtcg
2351	gccttcggaa	gatcaatgtg	tctactgggt	gctgggaaga	tatgtcccca
2401	tttacaaaata	gtttactaca	gtggatgccg	tctgagccca	gtgatgctgg
2451	attctgtgga	attttatcag	aaccagctac	tcggggactg	aaggctgcaa
2501	cctgcacaa	cccactcaat	ggtagtgtct	gtgaaaggcc	tgcaaaccac
2551	agtgcataagc	agtgcgggac	accatgtgcc	ttgaggacag	catgtggaga
2601	ttgcaccagc	ggcagctctg	agtgcacatg	gtgcagcaac	atgaagcagt

FIG. 10A



2651	gtgtggactc	caatgcctat	gtggcctcct	tcccttttgg	ccagtgtatg
2701	gaatgggtata	cgatgagcac	ctgccccctt	gaaaattggt	caggctactg
2751	tacctgtagt	cattgcttgg	agcaaccagg	ctgtggctgg	tgtactgatc
2801	ccagcaatac	tggcaaaggg	aaatgcatag	agggttccta	taaaggacca
2851	gtgaagatgc	cttcgcaagc	ccctacagga	aatttctatc	cacagcccct
2901	gctcaattcc	agcatgtgtc	tagaggacag	cagatacaac	tggcttttca
2951	ttcactgtcc	agccttgccaa	tgcaacggcc	acagtaaatg	catcaatcag
3001	agcatctgtg	agaagtgtga	gaacctgacc	acaggcaagc	actgcgagac
3051	ctgcatactt	ggccttctacg	gtgatcccac	caatggaggg	aaatgtcagc
3101	catgcaagtg	caatgggcac	gcgtctctgt	gcaacaccaa	cacgggcaag
3151	tgcttctgca	ccaccaaggg	cgtcaagggg	gacgagtgcc	agctatgtga
3201	ggtagaaaat	cgataccaag	gaaaccctct	cagaggaaca	tgttattata
3251	ctcttcttat	tgactatcag	ttcaccttta	gtctatccca	ggaagatgat
3301	cgctattaca	cagctatcaa	ttttgtggct	actcctgacg	aacaaaacag
3351	ggatttggac	atgttcatca	atgcctccaa	gaatttcaac	ctcaacatca
3401	cctgggctgc	cagtttctca	gctggaaccc	aggetggaga	agagatgcct
3451	gttgtttcaa	aaaccaacat	taaggagtac	aaagatagtt	tctctaataga
3501	gaagtttgat	tttcgcaacc	acccaaatat	cactttcttt	gtttatgtca
3551	gtaatttcac	ctggcccatc	aaaattcaga	ttgccttctc	tcagcacagc
3601	aattttatgg	acctgggtaca	gttcttcgtg	actttcttca	gttgtttcct
3651	ctctttgctc	ctggtggctg	ctgtggtttg	gaagatcaaa	caaagttggt
3701	gggcctccag	acgtagagag	caacttcttc	gagagatgca	acagatggcc
3751	agccgtccct	ttgcctctgt	aaatgtcgcc	ttggaaacag	atgaggagcc
3801	tcctgatctt	attgggggga	gtataaagac	tgttcccaaa	cccattgcac
3851	tggagccgtg	ttttggcaac	aaagccgctg	tcctctctgt	gtttgtgagg
3901	ctccctcgag	gcctgggtgg	catccctcct	cctgggcagt	caggctcttgc
3951	tgtggccagc	gccctgggtg	acatttctca	gcagatgccg	atagtgtaca
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4051	cctgggacct	gcattctga			

FIG. 10B



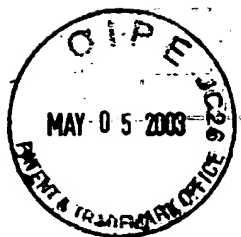
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QCVCPAGWVGEQCQHCGRFRLTGSSGFVTDGPGNYKYKTKCTWIEGQPNRIMRLRF
NHFATECSWDHLYVYDGDSDIYAPLVAFSGLIVPERDGNETVPEVVATSGYALLHFFS
DAAYNLTGFNITYSFDMPNNCSGRGECKISNSSETVECECSENWKGEACDIPHCTDN
CGFPHRGICNSSDVRGCSCFSDWQGFSCSVVPANQSFWTREEYSNLKLPRASHKAVV
NGNIMWVVGGMFNHSDYNMVLAYDLASREWLPLNRSVMNVVRYGHSLALYKDKIYM
YGGKIDPTGNVTNELRVFHIHNESWVLLTPKAKEQYAVVGHSAHIVTLKNGRVVMLVI
FGHCPLYGYISNVQEYDLDKNTWSILHTQGALVQGGYGHSSVYDHRTRALYVHGGYKA
FSANKYRLADDLYRYDVTQMWTLKDSRFFRYLHTAVIVSGTMLVFGGNTHTNDTSMS
HGAKCFSSDFMAYDIACDRWSVLPRPDLHHDVNRFGHSAVLHNSTMYVFGGFNSLLLS
DILVFTSEQCDAHRSEAACLAAGPGIRCWNVTGSSQCISWALATDEQEEKLKSECFSK
RTLHDHRCDOHTDCYSCTANTNDCHWCNDHCVPRNHSCSEGQISIFRYENC PKDNPMY
YCNKKTSCRSCALDQNCQWEPRNQECIALPENICGIGWHLVGN SCLKITTAKENYDNA
KLFCRNHNALLASLTQKKVEFVLKQLRIMQSSQSMSKLTLPWVGLRKINVS YWCWE
DMSPFNTSLLQWMPSEPSDAGFCGILSEPSTRGLKAATCINPLNGSV CERPANHSAKQ
CRTPCALRTACGDCTSGSSECMWCSNMKQCVDSNAYVASFPFGQCM EWTMSTCPPEN
CSGYCTCSHCLEQPGCGWCTDPSNTGKGKCI EGSYKGPVKMPSQAPTGNFY PQPLLNS
SMCLEDSRYNWSFIHCPACQCNGHSKCINQSICEK CENLTGKH CETCISGFYGDPTN
GGKCQPCCKNGHASLCNTNTGKCFCTTKGVKGDECQLCEVENRYQGNPLRGTCYYTLL
IDYQFTFSLSQEDDRYYTAINFVATPDEQNRDLDMFINASKNFNLNITWAASF SAGTQ
AGEEMPVVS KTNIEYKDSFSNEKFD FRNHPNITFFVYVSNFTWPIKIQVQTEQ

FIG. 11



1	atggtggccg	cagcggcgcc	aactgaggca	aggctgagga	ggaggacggc	ggcgacggca
61	gcgctcgccg	gcaggagcgg	cgggcccgcac	tgggactggg	acgtgaccag	ggctgggagg
121	ccggggctgg	gggcccggct	gcgcctcccg	cggctgctgt	ctccaccgct	gcggccacgg
181	ctgctgctgc	tgtgttgtt	gctcccgcg	ccgctgttgc	tgtgctgct	gccctgtgag
241	gccgaggccg	cggcggcgcc	ggcggcggtg	tggggctcag	ccgcagccga	ggccaaggaa
301	tgtgaccggc	cctgtgtcaa	cggcggtcgc	tgaaccctg	gcaccggcca	gtgcgtctgc
361	cccgcgggct	gggtgggcga	gcaatgccag	cactgcccgg	gccgcttcag	actaactgga
421	tcttctgggt	ttgtgacaga	tggacctgga	aattataaat	acaaaacgaa	gtgcacgtgg
481	ctcattgaag	gacagccaaa	tagaataatg	agacttcggt	tcaatcattt	tgtacagag
541	tgtagtggg	accatttata	tgtttatgat	ggggactcaa	tttatgcacc	gctagtgtct
601	gcatttagtg	gcctcattgt	tcctgagaga	gatggcaatg	agactgtccc	tgaggttgtt
661	gccacatcag	ggtatgcctt	gctgcatttt	tttagtgatg	ctgcttataa	tttgactgga
721	tttaatat	cttacagttt	tgatattgtt	ccaaataact	gctcaggccg	aggagagtgt
781	aagatcagta	atagcagcga	aactgttgaa	tgtgaatgtt	ctgaaaactg	gaaaggtgaa
841	gcatgtgaca	ttcctcactg	tacagacaac	tgtggttttc	ctcatcgagg	catctgcaat
901	tcaagtgatg	tcagaggatg	ctcctgcttc	tcagactggc	agggctcctg	atgttcagtt
961	cctgtaccag	ctaaccagtc	attttggact	cgagaggaat	attctaactt	aaagctcccc
1021	agagcatctc	ataaagctgt	ggtcaatgga	aacattatgt	gggttgttgg	aggatatatg
1081	ttcaaccact	cagattataa	catggttcta	gcgtatgacc	ttgctttcag	ggagtggctt
1141	ccactaaacc	gttctgtgaa	caatgtgggt	gttagatatg	gtcattcttt	ggcattatag
1201	aaggataaaa	tttacatgta	tggaggaaaa	attgatccaa	ctgggaatgt	gaccaatgag
1261	ttgagagttt	ttcacattca	taatgagtc	tgggtgttgt	tgacccttaa	ggcaaaggag
1321	cagtatgcag	tgggtgggca	ctctgcacac	attgttacac	tgaagaatgg	ccgagtgggtc
1381	atgctgggtc	tccttgggtc	ctgccccttc	tatggatata	taagcaatgt	gcaggaatat
1441	gatttggata	agaacacatg	gagtatatta	cacaccaggg	gtgcccctgt	gcaaggggggt
1501	tacggccata	gcagtggtta	cgaccatagg	accagggccc	tatacgttca	tgggtgtctac
1561	aaggctttca	gtgccaataa	gtaccggctt	gcagatgac	tctaccgata	tgatgtggat
1621	accagatgt	ggaccattct	taaggacagc	cgatttttcc	gttacttgca	cacagctgtg
1681	atagtgaagt	gaaccatgct	ggtgtttggg	ggaaacacac	acaatgacac	atctatgagc
1741	catggcgcca	aatgcttctc	ttcagatttc	atggcctatg	acattgcctg	tgaccgctgg
1801	tcagtgcctc	ccagacctga	tcctccacct	gatgtcaaca	gatttggcca	ttcagcagtc
1861	ttacacaaca	gcaccatgta	tgtgttcggg	ggtttcaata	gtctcctcct	cagcgacatc
1921	ctggtattca	cctcggaaca	gtgtgatgcg	catcgagtg	aagccgcttg	tttagcagca
1981	ggacctggta	ttcgggtgtg	gtggaacaca	gggtcgcttc	agtgtatctc	gtgggcgctg
2041	gcaactgatg	aacaagaaga	aaagttaaaa	tcagaatgtt	tttccaaaag	aactcttgac
2101	catgacagat	gtgaccagca	cacagattgt	tacagctgta	cagccaacac	caatgactgc
2161	cactgggtgca	atgaccattg	tgtcccagg	aaccacagct	gctcagaagg	ccagatctcc
2221	atttttaggt	atgagaattg	ccccaggat	aaccccatgt	actactgtaa	caagaagacc
2281	agctgcagga	gctgtgccct	ggaccagaac	tgccagtggg	agccccggaa	tcaggagtgc
2341	attgccctgc	ccgaaaatat	ctgtggcatt	ggctggcatt	tgggtggaaa	ctcatgtttg
2401	aaaattacta	ctgccaagga	gaattatgac	aatgctaaat	tgttctgtag	gaaccacaat
2461	gcccttttgg	cttctcttac	aaccagaag	aaggtagaat	ttgtccttaa	gcagctgcga
2521	ataatgcagt	catctcagag	catgtccaag	ctcaccttaa	ccccatgggt	cggccttcgg
2581	aagatcaatg	tgtcctactg	gtgctgggaa	gatatgtccc	catttacaaa	tagtttacta
2641	cagtggatgc	cgtctgagcc	cagtgatgct	ggattctgtg	gaattttatc	agaaccaggt
2701	actcggggac	tgaaggctgc	aacctgcac	aacccactca	atggtagtgt	ctgtgaaagg
2761	cctgcaaacc	acagtgtctaa	gcagtgccgg	acaccatgtg	ccttgaggac	agcatgtgga
2821	gattgcacca	gcggcagctc	tgagtgcacg	tgggtgcagca	acatgaagca	gtgtgtggac
2881	tccaatgcct	atgtggcctc	cttccctttt	ggccagtgtg	tggaaatgga	tacgatgagc
2941	acctgcccc	ctgaaaattg	ttcaggctac	tgtacctgta	gtcattgtct	ggagcaacca
3001	ggctgtggct	ggtgtactga	tcccagcaat	actggcaaag	ggaaatgcat	agaggggttc
3061	tataaaggac	cagtgaagat	gccttcgcaa	gcccctacag	gaaatttcta	tccacagccc
3121	ctgctcaatt	ccagcatgtg	tctagaggac	agcagatata	actggctctt	cattcactgt
3181	ccagcttgcc	aatgcaacgg	ccacagttaa	tgcataatc	agagcatctg	tgagaagtgt
3241	gagaacctga	ccacaggcaa	gcactgcgag	acctgcatat	ctggcttcta	cggcttccc
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3361	aacacgggca	agtgtctctg	caccaccaag	ggcgtcaagg	gggacgagtg	ccagctatgt
3421	gaggtagaaa	atcgatacca	aggaaaccct	ctcagaggaa	catgttatta	tactcttctt
3481	attgactatc	agttcacctt	tagtctatcc	caggaagatg	atcgctatta	cacagctatc
3541	aattttgtgg	ctactcctga	cgaacaaaac	agggatttgg	acatgttcat	caatgcctcc
3601	aagaatttca	acctcaacat	cacctgggct	gccagtttct	cagctggaac	ccagcttggg
3661	gaagagatgc	ctgttgtttc	aaaaaccaac	attaaaggagt	acaaagatag	tttctcta
3721	gagaagtttg	attttcgcaa	ccacccaaat	atcactttct	ttgtttatgt	cagtaatttc
3781	acctggccca	tcaaaattca	ggtgcaaaact	gaacaatga		

FIG. 12



1	MVAAAAATEA	RLRRRTAATA	ALAGRSGGPH	WDWDVTRAGR	PGLGAGLRLP
51	RLLSPLRPR	LLLLLLLLPP	PLLLLLLPCE	AEAAAAAAV	SGSAAAEAKE
101	CDRPCVNGGR	CNPGTGQCVC	PAGWVGEQCQ	HCGGRFRLTG	SSGFVTDGPG
151	NYKYKTKCTW	LIEGQPNRIM	RLRFNHFATE	CSWDHLYVYD	GDSIYAPLVA
201	AFSGLIVPER	DGNETVPEVV	ATSGYALLHF	FSDAAYNLTG	FNITYSFDMC
251	PNNCSGRGEC	KISNSSETVE	CECSENWKGE	ACDIPHCTDN	CGFPHRGICN
301	SSDVRCSCF	SDWQGPSCSV	PVPANQSFWT	REEYSNLKLP	RASHKAVVNG
351	NIMWVVGGM	FNHSDYNMVL	AYDLASREWL	PLNRSVNNVV	VRYGHSALY
401	KDKIYMYGK	IDPTGNVTNE	LRVFHINES	WVLLTPKAKE	QYAVVGHSAH
451	IVTLKNGRVV	MLVIFGHCP	YGYISNVQY	DLDKNTWSIL	HTQGALVQGG
501	YGHSSVYDHR	TRALYVHGGY	KAFSANKYRL	ADDLYRYDVD	TQMWTILKDS
551	RFFRYLHTAV	IVSGTMLVFG	GNTHNDTSMS	HGAKCFSSDF	MAYDIACDRW
601	SVLPRPDLHH	DVNRFGHSAV	LHNSTMVVF	GFNSLLLSDI	LVFTSEQCDA
651	HRSEAACLAA	GPGIRCVWNT	GSSQCISWAL	ATDEQEEKLK	SECFSKRTLD
701	HDRCDQHTDC	YSCTANTNDC	HWCNDHCVPR	NHSCSEGQIS	IFRYENC PKD
751	NPMYYCNKKT	SCRSCALDQN	CQWEPRNQC	IALPENICGI	GWHLVGNSCL
801	KITTAKENYD	NAKLFCRNHN	ALLASLTQK	KVEFVLKQLR	IMOSSQSMSK
851	LTLTPWVGLR	KINVSYWWE	DMSPFTNSLL	QWMPSEPSDA	GFCGILSEPS
901	TRGLKAATCI	NPLNGSV CER	PANHSAQCR	TPCALRTACG	DCTSGSSECM
951	WCSNMKQCVD	SNAYVASFPF	GQCMEWYTMS	TCPPENC SGY	CTCSHCLEQP
1001	GCGWCTDPSN	TGKGKCI EGS	YKGPVKMPSQ	APTGNFY PQP	LLNSSMCLED
1051	SRYNWSFIHC	PACQCNGH SK	CINQSICEKC	ENLTTGKHCE	TCISGFY GDP
1101	TNGGKCQPCK	CNGHASLCNT	NTGKCFCTTK	GVKGDECQLC	EVENRYQGNP
1151	LRGTCYYTLL	IDYQFTFSL S	QEDDRYYTAI	NFVATPDEQN	RDLDMFINAS
1201	KNFNLNITWA	ASFSAGTQAG	EEMPVVS KTN	IKEYKDSFSN	EKFDFRNHPN
1251	ITFFVYVS NF	TWPIKIQIAF	SQHSNFM DLV	QFFVTFFSCF	LSLLLVA AVV
1301	WKIKQSCWAS	RRREQLLREM	QMASRPFAS	VNVALETDEE	PPDLIGGSIK
1351	TVPKP IALEP	CFGNKAAVLS	VFVRLPRGLG	GIPPPGQSGL	AVASALVDIS
1401	QOMPIVYKEK	SGAVRNRKQQ	PPAQPGTCI		

FIG. 13



1	atggtggccg	cagcggcggc	aactgaggca	aggctgagga	ggaggacggc
51	ggcgacggca	gcgctcgccg	gcaggagcgg	cgggccgcac	tgggactggg
101	acgtgaccag	ggctgggagg	ccggggctgg	gggccgggct	gcgcctcccg
151	cggctgctgt	ctccaccgct	gcggccacgg	ctgctgctgc	tgctgttgtt
201	gctcccgcgg	ccgctgttgc	tgctgctgct	gccctgtgag	gccgaggccg
251	cggcggcggc	ggcggcgggt	tcgggctcag	ccgcagccga	ggccaaggaa
301	tgtgaccggc	cctgtgtcaa	cggcggtcgc	tgcaaccctg	gcaccggcca
351	gtgctgtctg	cccgcgggct	gggtgggcga	gcaatgccag	cactgcgggg
401	gccgcttcag	actaactgga	tcttctgggt	ttgtgacaga	tggacctgga
451	aattataaat	acaaaacgaa	gtgcacgtgg	ctcattgaag	gacagccaaa
501	tagaataatg	agacttcgtt	tcaatcattt	tgctacagag	tgtagtggg
551	accatttata	tgtttatgat	ggggactcaa	tttatgcacc	gctagtgtct
601	gcatttagtg	gcctcattgt	tcctgagaga	gatggcaatg	agactgtccc
651	tgaggttggt	gccacatcag	gttatgcctt	gctgcatttt	tttagtgatg
701	ctgcttataa	tttgactgga	tttaatat	cttacagttt	tgatatgtgt
751	ccaaataact	gctcaggccg	aggagagtgt	aagatcagta	atagcagcga
801	aactgttgaa	tgtgaatgtt	ctgaaaactg	gaaagggtgaa	gcattgtgaca
851	ttcctcactg	tacagacaac	tgtgggtttt	ctcatcgagg	catctgcaat
901	tcaagtgatg	tcagaggatg	ctcctgcttc	tcagactggc	agggtcctgg
951	atgttcagtt	cctgtaccag	ctaaccagtc	attttggact	cgagagggaat
1001	attctaactt	aaagctcccc	agagcatctc	ataaagctgt	ggtcaatgga
1051	aacattatgt	gggttgttgg	aggatatatg	ttcaaccact	cagattataa
1101	catggttcta	gcgtatgacc	ttgcttctag	ggagtggctt	ccactaaacc
1151	gttctgtgaa	caatgtgggt	gttagatatg	gtcattcttt	ggcattatac
1201	aaggataaaa	tttacatgta	tggaggaaaa	attgatccaa	ctgggaatgt
1251	gaccaatgag	ttgagagttt	ttcacattca	taatgagtca	tgggtgttgt
1301	tgaccacctaa	ggcaaaggag	cagtatgcag	tgggtgggca	ctctgcacac
1351	attgttacac	tgaagaatgg	ccgagtgggc	atgctgggtc	tctttgggtc
1401	ctgcccctct	tatggatata	taagcaatgt	gcagggaatat	gatttggata
1451	agaacacatg	gagtatatta	cacaccagg	gtgcccttgt	gcaaggggggt
1501	tacggccata	gcagtgttta	cgaccatagg	accagggccc	tatacgttca
1551	tgggtggctac	aaggctttca	gtgccaataa	gtaccggctt	gcagatgatc
1601	tctaccgata	tgatgtggat	accagatgtg	ggaccattct	taaggacagc
1651	cgattttttcc	gttacttgca	cacagctgtg	atagtgagtg	gaaccatgct
1701	ggtgttttggg	ggaaacacac	acaatgacac	atctatgagc	catggcgcca
1751	aatgcttctc	ttcagatttc	atggcctatg	acattgcctg	tgaccgctgg
1801	tcagtgcctc	ccagacctga	tctccaccat	gatgtcaaca	gatttggcca
1851	ttcagcagtc	ttacacaaca	gcaccatgta	tgtgttcggg	ggtttcaata
1901	gtctcctcct	cagcgacatc	ctggtattca	cctcggaaca	gtgtgatgcg
1951	catcggagtg	aagccgcttg	tttagcagca	ggacctggtg	ttcgggtgtgt
2001	gtggaacaca	gggtcgtctc	agtgtatctc	gtgggcgctg	gcaactgatg
2051	aacaagaaga	aaagttaaaa	tcagaatgtt	tttccaaaag	aactcttgac
2101	catgacagat	gtgaccagca	cacagattgt	tacagctgta	cagccaacac
2151	caatgactgc	cactggtgca	atgaccattg	tgtccccagg	aaccacagct
2201	gctcagaagg	ccagatctcc	attttttaggt	atgagaattg	ccccagggat
2251	aaccccatgt	actactgtaa	caagaagacc	agctgcagga	gctgtgccct
2301	ggaccagaac	tgccagtggg	agccccggaa	tcaggagtgc	attgccctgc
2351	ccgaaaatat	ctgtggcatt	ggctggcatt	tggttggaaa	ctcatgtttg
2401	aaaattacta	ctgccaagga	gaattatgac	aatgtctaat	tgttctgtag
2451	gaaccacaat	gcccttttgg	cttctcttac	aaccagaag	aaggtagaat
2501	ttgtccttaa	gcagctgcga	ataatgcagt	catctcagag	catgtccaag
2551	ctcaccttaa	ccccatgggt	cggccttcgg	aagatcaatg	tgtcctactg
2601	gtgctgggaa	gatatgtccc	catttacaaa	tagtttacta	cagtggatgc

FIG. 14A



2651	cgtctgagcc	cagtgatgct	ggattctgtg	gaattttatc	agaacccagt
2701	actcggggac	tgaaggetgc	aacctgcatc	aaccactca	atggtagtgt
2751	ctgtgaaagg	cctgcaaacc	acagtgctaa	gcagtgccgg	acaccatgtg
2801	ccttgaggac	agcatgtgga	gattgcacca	gcggcagctc	tgagtgcattg
2851	tggtgcagca	acatgaagca	gtgtgtggac	tccaatgcct	atgtggcctc
2901	cttccctttt	ggccagtgtg	tggaaatggta	tacgatgagc	acctgcccc
2951	ctgaaaattg	ttcaggctac	tgtacctgta	gtcattgctt	ggagcaacca
3001	ggctgtggct	gggtgtactga	tcccagcaat	actggcaaag	ggaaatgcat
3051	agagggttcc	tataaaggac	cagtgaagat	gccttcgcaa	gcccctacag
3101	gaaattttcta	tccacagccc	ctgctcaatt	ccagcatgtg	tctagaggac
3151	agcagataca	actggctctt	cattcactgt	ccagcttgcc	aatgcaacgg
3201	ccacagtaaa	tgcattcaatc	agagcatctg	tgagaagtgt	gagaacctga
3251	ccacaggcaa	gcactgcgag	acctgcatat	ctggcttcta	cgggtgatccc
3301	accaatggag	ggaaatgtca	gccatgcaag	tgcaatgggc	acgcgtctct
3351	gtgcaacacc	aacacgggca	agtgtctctg	caccaccaag	ggcgtcaagg
3401	gggacgagtg	ccagctatgt	gaggtagaaa	atcgatacca	aggaaacctt
3451	ctcagaggaa	catgttatta	tactcttctt	attgactatc	agttcacctt
3501	tagtctatcc	caggaagatg	atcgctatta	cacagctatc	aattttgtgg
3551	ctactcctga	cgaacaaaac	agggatttgg	acatgttcat	caatgcctcc
3601	aagaatttca	acctcaacat	cacctgggct	gccagtttct	cagctggaac
3651	ccaggctgga	gaagagatgc	ctgttgtttc	aaaaaccaac	attaaggagt
3701	acaaagatag	ttctctaat	gagaagtttg	attttcgcaa	ccacccaaat
3751	atcactttct	ttgtttatgt	cagtaatttc	acctggccca	tcaaaattca
3801	gattgccttc	tctcagcaca	gcaattttat	ggacctggta	cagttcttcg
3851	tgactttctt	cagttgtttc	ctctctttgc	tcctgggtggc	tgctgtgggt
3901	tggagatca	aacaaagttg	ttgggcctcc	agacgtagag	agcaacttct
3951	tcgagagatg	caacagatgg	ccagccgtcc	ctttgcctct	gtaaatgtcg
4001	ccrtggaaac	agatgaggag	cctcctgac	ttattggggg	gagtataaag
4051	actgttccca	aaccatttgc	actggagccg	tgttttggca	acaaagccgc
4101	tgctctctct	gtgtttgtga	ggctccctcg	aggcctgggt	ggcatccctc
4151	ctcctgggca	gtcaggtctt	gctgtggcca	gcgccttggg	ggacatttct
4201	cagcagatgc	cgatagtgtg	caaggagaag	tcaggagccg	tgagaaaccg
4251	gaagcagcag	ccccctgcac	agcctgggac	ctgcatctga	

FIG. 14B

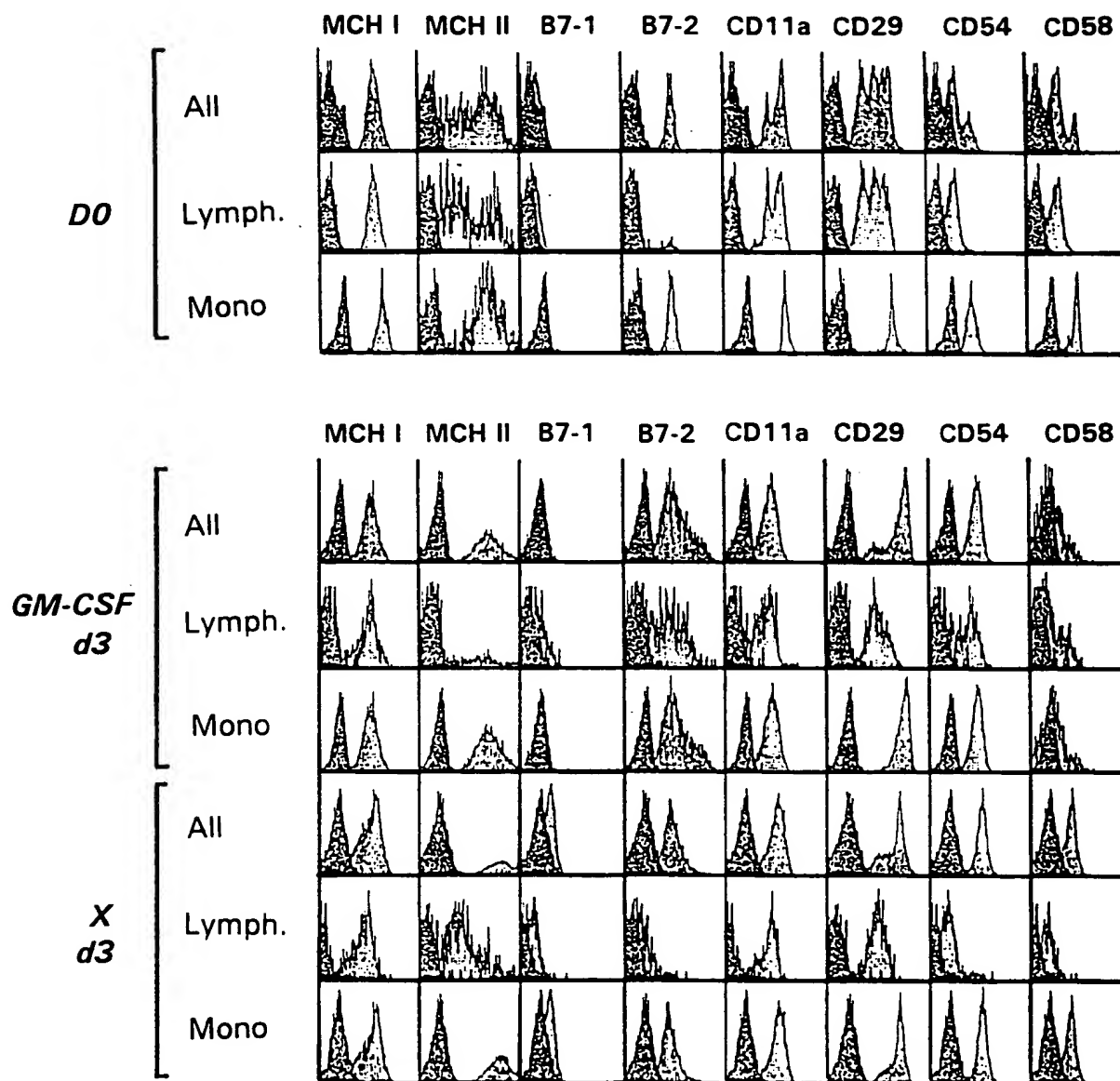


FIG. 15